

including, for example, available items and temporarily unavailable items, and not permanently unavailable or inactive items. Self-service application 28 may function to complete a transaction.

[0025] In-store computer 12 may include an in-store server computer which stores modified menu data 24. Self-service computers 14 may be client computers which access modified menu data 24 from in-store computer 12 when needed.

[0026] Alternatively, self-service computers 14 may store copies of modified menu data 24. In-store computer 12 may send modified menu data 24 to each of self-service computers 14 following changes.

[0027] Referring now to FIG. 2, a second example system 10 in a quick service or fast food venue includes one or more attendant computers 32, one or more self-service kiosks 34, and a host computer 36.

[0028] Attendant computer 32 and self-service kiosk 34 may be located in close proximity to another so that an attendant may see and verbally interact with a customer.

[0029] Alternatively, attendant computer 32 and self-service kiosk 34 may be located separately from each other. For example, self-service kiosk 34 may be located in a drive-through lane or in a play area.

[0030] In this example, attendant computer 32 executes menu modification application 42, which receives menu data 40 from host computer 36 and modifies menu data 40 to produce modified menu data 48. In alternative embodiments, menu modification application 42 may reside on a different or separate in-store computer.

[0031] Modifications to menu data 40 include classifying food items in menu data 40 as available for sale, temporarily unavailable for sale, or permanently inactive or unavailable for sale in response to user selection. In response, self-service application 52 and attendant application 44 display available food items as being available for sale, display temporarily unavailable food items as being temporarily unavailable for sale, and do not display permanently unavailable or inactive food items. Menu modification application 42 stores modified menu data 48 as part of self-service application data 46.

[0032] Attendant computer 32 is coupled to one or more self-service kiosks 34. Attendant computer 32 allows an attendant to interact with a customer at any of self-service kiosks 34 during a transaction. Attendant computer 32 executes attendant application 44, which access local or remote copies of self-service application data 46 associated with each of the self-service kiosks 34 to obtain data defining a screen currently displayed by one or more self-service kiosks 34, including modified menu data 48. Modified image data 48 may include images of food items available for selection by a customer, and food selections already made by the customer.

[0033] Attendant computer 14 further executes sharing application 50, which receives the identity of the screen currently displayed by self-service application 52, and any selections made by a customer on that screen.

[0034] Attendant application 44 stores the screen identity information and the selections in the locally stored copy of self-service application data 46. Thus, sharing application 44 ensures that locally stored self-service application data 46 on attendant station 32 are synchronized with self-service application data 46 stored on self-service kiosk 34. An attendant at attendant computer 32 sees the same display information that is displayed by self-service kiosk 34. The attendant can make

selections on behalf of the customer and the customer can watch the attendant selections as they are performed at self-service kiosk 34.

[0035] Self-service kiosk 34 allows a self-service customer to perform a transaction with or without assistance from an attendant at attendant computer 32. Self-service kiosk 34 executes self-service application 52 for this purpose. Self-service application 52 displays screens from self-service application data 46, including modified menu data 48. Modified image data 48 may include images of food items available for selection by a customer, and food selections already made by the customer.

[0036] Self-service kiosk 34 additionally executes sharing application 50, which sends information to attendant computer 32, including the identity of a currently displayed screen and any selections made by a customer on that screen. Sharing application 50 further receives selections made by an attendant at attendant computer 32.

[0037] Self-service application 52 stores the selections as updates to self-service application data 46. Thus, sharing application 50 ensures that locally stored self-service application data 46 on self-service kiosk 34 is synchronized with self-service application data 46 stored by attendant computer 32. A customer at self-service kiosk 34 sees the same display information that is displayed by attendant computer 32. The customer can make selections and the attendant can watch the customer selections in real time as they are performed at attendant computer 32.

[0038] Attendant application 44 and self-service application 52 may optionally hand off payment processing to transaction software 54.

[0039] Turning now to FIG. 3, an example screen 60 illustrating menu modification is shown.

[0040] Example screen 60 includes a transaction screen of attendant application 44. The transaction screen includes a menu section 62 containing a menu of items in menu data 40 and their images, a receipt section 64 which during a transaction contains a running tally of menu item selections, and a control section 66 containing navigation choices for transactions, including buttons that allow a user to return to a main menu, delete an item from receipt section 64, cancel the order, modify an item, return to a main menu, or complete payment.

[0041] As illustrated, menu modification application 42 runs on top of attendant application 44 as an extra control 68. Alternatively, menu modification application 42 may run separately from attendant application 44.

[0042] Menu section 62 includes a menu of items or groups of items sent by host computer 36 within menu data 40. In the illustrated example, the menu of items includes images of the items which are also sent by host computer 36.

[0043] Menu section 62 may be divided into a plurality of screens, and may include a hierarchy of items identified in groups.

[0044] Menu items within menu section 62 may include advertisements for food items or “display only” items, orderable food items, condiments, and toppings or other extras.

[0045] Menu control 68 includes buttons that allow a user to modify menu data 40. The buttons include a make inactive button, a make temporarily unavailable button, and a make available button. A user selects a menu item or a group of menu items before selecting one of the control buttons.

[0046] The make inactive button marks a selected menu item or group of menu items as permanently unavailable or inactive. In response, menu modification application 42